(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 197 769**
A3

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **86302477.4**

(22) Date of filing: **03.04.86**

(51) Int. Cl.⁴: **C 25 C 1/00**
// C25C1/16, C25D21/18

(30) Priority: **03.04.85 GB 8508726**

(43) Date of publication of application: **15.10.86**
Bulletin 86/42

(84) Designated Contracting States: **BE DE FR GB IT**

(88) Date of deferred publication of search report: **15.04.87 Bulletin 87/16**

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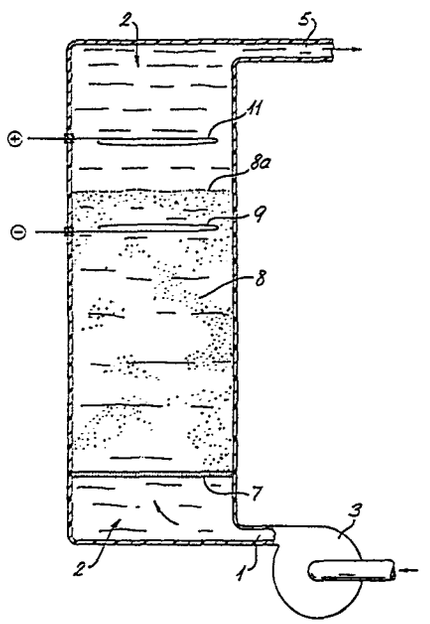
(54) Purifying mixed-cation electrolyte.

(57) An electrolyte containing 65 g/l zinc and 150 g/l Cu is purified in zinc, that is, the copper is removed, by causing the electrolyte to fluidise a bed (8) of ½ mm copper particles. The bed is fluidised by 25% to make it 42 cm deep. An anode (11) is disposed above the top of the bed. A cathode (9) is disposed part-way up the bed. Copper is electroplated onto the bed particles. Any zinc which may be electroplated onto the bed particles tends to redissolve with concomitant cementation, on the particles, of copper, which can be recovered. The elektrolyte is thus eventually completely stripped of copper and can be used for zinc electrowinning.

By controlling the pH of the electrolyte, substantially one metal, or one desired combination of metals, may be removed. In particular, pure copper deposition can be completed at low pH even in the presence of cadmium; upon a substantial increase in pH, cadmium deposition will occur.



EP 0 197 769 A3

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EUROPEAN SEARCH REPORT

0197769
Application number

EP 86 30 2477

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	GB-A-2 144 770 (NATIONAL RESEARCH DEVELOPMENT CORP.) * Claims 1,2 * & EP-A-136 786	1,2	C 25 C 1/00
X	* Claims 3-18 *	3-18	
Y,A	US-A-4 240 886 (D.R. HODGES et al.) * Claim 4 *	1,2	
A	GB-B-1 348 787 (NATIONAL RESEARCH DEVELOPMENT CORP.) * Claims 1,4 *	1,2	
A	US-A-4 212 722 (M.M. AVEDESIAN et al.)		TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	BE-A- 831 442 (S.A. PAREL)		C 25 C C 25 D
A	DE-A-1 956 457 (HUMPHREYS & GLASGOW)		

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	20-01-1987	DE ANNA P.L.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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